



Gorontalo Development Review

<https://jurnal.unigo.ac.id/index.php/gdrev>

Vol 09, No 01, Tahun 2026

P-ISSN : 2614-5170, E- ISSN :2615-1375

Nationally Accredited Journal, Decree No.225/E/KPT/2022

Industri Kreatif Unggulan Kota Padang: Meningkatkan Daya Saing di Pasar Asia

Padang City's Leading Creative Industry: Increasing Competitiveness In The Asian Market

Erni Febrina Harahap¹, Siti Rahmi², Winny Amelianda Putri³, Ranni Basri Tanjung⁴

^{1,2,3,4} Universitas Bung Hatta

Email: ernifebrinaharahap@bunghatta.ac.id

Article info

Article history:

Received; 07-01-2026

Revised; 02-03-2026

Accepted; 01-04-2026

Abstract. *The creative economy is a vital driver of national and regional growth, primarily supported by small and medium-sized enterprises. In Padang City, West Sumatra, these businesses represent a significant portion of the industrial landscape and serve as a primary source of employment compared to larger corporations. Enhancing the competitiveness of these industries is essential for increasing regional revenue and improving community welfare. This study evaluates and identifies leading creative industries while examining the city's potential and the challenges faced in boosting market competitiveness. Furthermore, the research analyzes the collaborative roles of key stakeholders, including the community, academics or entrepreneurs, and the government. Utilizing a combination of comparative advantage, analytical hierarchy Process, SWOT analysis, the findings aim to provide a comprehensive framework for industrial development. By identifying core strengths and addressing existing barriers, this research offers insights into how local stakeholders can foster a more resilient and competitive creative ecosystem in Padang City.*

Abstrak. Ekonomi kreatif merupakan penggerak vital pertumbuhan nasional dan daerah yang utamanya didukung oleh usaha kecil dan menengah. Di Kota Padang, Sumatera Barat, sektor ini mendominasi lanskap industri dan menjadi sumber lapangan kerja utama dibandingkan korporasi besar, sehingga penguatan daya saingnya menjadi sangat esensial untuk meningkatkan pendapatan daerah serta kesejahteraan masyarakat. Penelitian ini mengevaluasi dan mengidentifikasi industri kreatif unggulan sembari menelaah potensi kota dan tantangan dalam meningkatkan daya saing pasar, termasuk menganalisis peran kolaboratif pemangku kepentingan kunci seperti masyarakat, akademisi atau

pengusaha, dan pemerintah. Dengan menggunakan metode keunggulan komparatif, *Analytical Hierarchy Process*, dan analisis SWOT, temuan ini bertujuan untuk menyediakan kerangka kerja komprehensif bagi pengembangan industri guna menciptakan ekosistem kreatif yang lebih tangguh dan kompetitif di Kota Padang melalui identifikasi kekuatan inti serta penanganan hambatan yang ada.

Keywords:

*Creative
Industries,
Competitiveness,
Potential*

Corresponden author:

Email: ernifebrinaharahap@bungghatta.ac.id

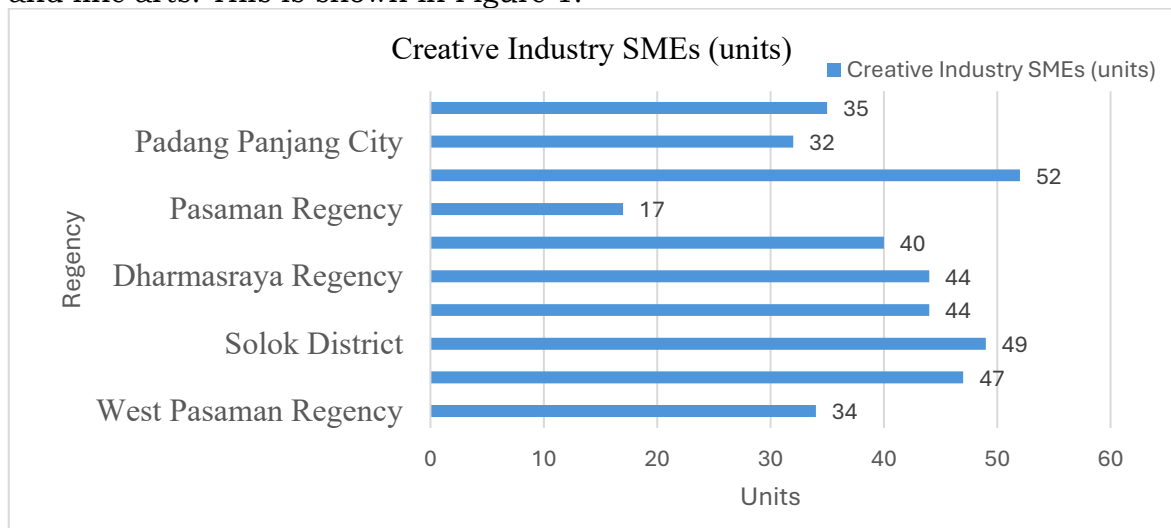
Introduction

The development of the national region is directed at reducing disparities between regions and advancing the region to become more developed, independent, and competitive by encouraging the accelerated development of economic growth center and exploring the potential and excellence of the region (Alisjahbana et al, 2002). Creative economic development is an opportunity to create economic benefits from local potential and demographic bonuses. Each Indonesian region has the ability to achieve innovative economic development in the tourism industry. Both domestic and foreign tourists are drawn to Indonesia because of its rich natural resources and distinctive local culture. Across the archipelago, tourism makes a substantial contribution to local revenue. A change has occurred in the destination countries of international tourists, which initially went from developed countries to countries in Asia, including Indonesia, which gets priority. This is a great opportunity for Indonesia and its regions to develop their tourism potential and attract these international tourists. Indonesia's tourism sector is 139 large and ranks in the top five in ASEAN according to *Travel and Tourism Competitiveness 2012* (Dupeyras and MacCallum (2013). When paired with Indonesia's creative economy sector, the country's vast natural tourist potential presents a significant chance to boost both state revenue and community well-being. Each local government is encouraged to grow the tourism industry and creative industries that propel regional economic expansion by this chance.

Small and medium-sized enterprises (SMEs), which are crucial to a nation's or region's economy, are frequently linked to the creative economy. Even though it contributes to Gross Domestic Product (GDP) growth, the proportion has not fairly reflected Indonesia's SMEs' superior performance in both domestic and international market competition. This is because Indonesian SMEs encounter a number of issues. The Indonesian Entrepreneurs Association (2020) asserts that SMEs encounter challenges. First, there is a lack of entrepreneurial skill in product innovation. Second, it is less able to conduct business operations effectively and efficiently since the level of knowledge is still insufficient in resolving organizational and business management issues. Third, compared to SMEs in other nations, networking is still scarce, making it difficult to access markets, information, and inputs. Fourth, national and regional markets cannot be effectively exploited by minimum links. Fifth, SMEs have less favorable access to financing, which limits

their ability to grow their businesses. These flaws reduce SMEs' competitiveness within a province in addition to impeding their ability to perform better (Porter, 1998).

This phenomenon of SME performance can be found in all provinces in Indonesia, especially in West Sumatra Province, where the economic base is driven by the SME sector, especially in creative industries (Daryono et al, 2013). According to Simatupang (2017), creative industries are those that depend on the abilities, creativity, and talents that are fundamental to every person and that have the capacity to enhance welfare through the production of intellectual works. Visual Communication Design, Game Application and Development, Architecture, Animation and Video, Interior Design, Product Design, Culinary, Crafts, Publishing, Fashion, Film, Photography, Advertising, Television-Radio, Music, Performing Arts, and Fine Arts are the 16 subsectors that make up West Sumatra's creative industry (Bank Indonesia, 2019). In 2022, the West Sumatra Province Tourism Office counted 394 units in 10 (10) districts and cities that were part of the creative business. The city of Padang is the region in West Sumatra with the greatest number of creative economy businesses, with 52 units, operating in 10 different creative industry sub-sectors: photography, product design, animation and video, craft, film, culinary, music, fashion, performing arts, television-radio, and fine arts. This is shown in Figure 1.



Source: West Sumatra Tourism Office Year 2022

Figure 1. Number of Creative Industry SMEs in West Sumatra 2021

Productivity or the amount of output generated for every unit of input, is frequently used to define competitiveness. Increasing the quantity of physical inputs (labor and capital), raising the caliber of inputs used, and advancing technology are all examples of productivity gains. Some people also claim that cheap pricing are used to determine competitiveness. Low prices mean not just cheap but also maintaining quality. The same quality at a lower price than competitors is, of course, more profitable and pursued by consumers; the term company has an advantage in terms of cost (cost leadership). With this efficiency, the company earns the same or greater margin despite setting low prices due to smaller costs (Martin, 2006). Furthermore, competitiveness may be exhibited through differentiation, which involves providing or doing things differently than

rivals. Something unique will attract customers. Different means more than merely being different, such as in packaging; the difference must be distinctive or provide extra value that competing items do not. Companies may leverage service to gain a competitive edge. Companies that deliver service excellence can please clients and strengthen their loyalty (WEF, 2014). Companies compete mainly in pampering their customers, namely by providing the best service to their customers. The technique commonly used to quantify competitiveness may be viewed through numerous indicators, including comparative advantage, competitive advantage, and an absolute advantage. So, it is vital to research what exceptional creative industries exist in Padang City and what the obstacles, possibilities, and methods to expand them are, as well as policies that must be implemented by the government or the triple helix.

Methods

The research methodologies used include both qualitative and quantitative methods. The major data collection approach involved conducting in-depth interviews with information sources, specifically industry players, as well as direct observation of the location. The *Analytical Hierarchy Process* (AHP), a system of evaluation by using paired assessments that depends on expert judgment to produce a priority scale, and competitive advantage are the topics of discussion. Then, continued with discussions on forums with creative industry *stakeholders*. Secondary data were gathered from the Provincial and Regency / City Industry and Trade Offices that participated in the study, as well as other relevant agencies. Then, use SWOT analysis to develop alternative strategies for improving industrial competitiveness. The analysis stage in SWOT is to incorporate all facts and information into quantitative models of strategy creation (Katarzyna, 2021). Finding the SWOT indicators is followed by determining the weight, rating, and score. Next, alternative strategies are developed by figuring out the exact location in the SWOT analysis diagram. The SWOT analysis diagram's coordinate placement indicates whether the company's strategy falls into region I, II, III, or IV. This aids in identifying the aggressiveness, diversification, turnaround, and defensiveness of the company's approach. After determining the coordinate position and which quadrant the company's strategic position is based on the SWOT analysis diagram, the next step is to create a SWOT matrix. This matrix is a technique used to construct the company's strategic elements according to the outcomes of earlier calculations. With this calculation, it can be determined which strategic position the company is in, whether WT (weakness-threats), ST (strength-threats), WO (*weakness-opportunity*), or SO (*strength-opportunity*). At this point, the indicators that were gathered in the first step which display opportunities, threats, weaknesses, and strengths are used to carry out the formulation. Description (table 1): *Comparative advantage* (SO). This cell combines two aspects, strengths and opportunities, that allow a company to flourish more quickly. This cell, *Mobilization* (ST), represents the interaction of threats and strengths. Efforts must be taken to deploy resources, which are the company's strengths, to mitigate external risks and even turn them into opportunities.

Table 1. SWOT Matrix

Internal		
\ External	<i>Opportunity</i>	<i>Treats</i>

<i>Strength</i>	<i>Comparative Advantage (SO)</i>	<i>Mobilization (ST)</i>
<i>Weakness</i>	<i>Divestment Investment (WO)</i>	<i>Damage Control (WT)</i>

Divestment Investment (WO): This cell displays the company's shortcomings and external opportunities. This condition creates an ambiguous option predicament. The opportunities provided are highly appealing, but they cannot be used because there are insufficient strengths to work on them. The scenario presents the option of passing up an opportunity (taken by others) or being obliged to work on it (investment). Damage Control (WT): This cell is the weakest of all cells since it is the intersection of external threats and the company's weaknesses, therefore making the wrong decision will result in a significant threat to the company. The approach used is damage control (managing losses) so that it is not more severe than predicted.

Results and Discussion

North Padang, Bungus Teluk Kabung, Lubuk Begalung, Lubuk Kilangan, South Padang, East Padang, Nanggalo, West Padang, Kuranji, Pauh, and Koto Tangah are the eleven sub-districts that make up Padang City. Each sub-district has MSMEs in their area, as shown in Table 2. As can be seen from the data, there is an average increase in MSMEs in Padang city, although in the North Padang sub-district, there is a decrease of (12,76%). MSMEs here include several creative economy businesses such as culinary, souvenirs, scrap processing, music, visual communication design, film, animation, videographer, advertising, embroidery, magician, barista, television/radio, performing arts, crafts, publishing/printing, and others. But of the various creative industries in Padang City, the most prominent is culinary, both packaged and served. This shows that the city of Padang is famous for its various types of food, both in taste and quality. For example, rendang has been named the world's most delicious food. Padang City's culinary is spread throughout the sub-district, and various types of side dishes and snacks are packaged and served.

Table 2. The Quantity and Growth of Padang City's MSMEs

No.	Regency	Year		Progress (%)
		2021	2022	
1	South Padang	279	310	11.11
2	West Padang	487	499	2.46
3	North Padang	384	335	(12.76)
4	East Padang	565	570	0.88
5	Koto Tangah	533	574	7.69
6	Nanggalo	168	214	27.38
7	Pauh	258	289	12.02
8	Kuranji	363	431	18.73
9	Lubuk Begalung	429	599	39.63
10	Bungus Teluk Kabung	60	107	78.33
11	Lubuk Kilangan	164	175	6.71
Total		3690	4103	11.19

Source : Data adapted from Office of Cooperatives and MSMEs of Padang City, 2023

Porter's Theory with *Comparative Advantage and Analytical Hierarchy Process (AHP)*, a framework of evaluation by using paired comparisons that depends on expert judgment, is used in the analysis of this study to establish a priority scale (Saaty, 2008). In order to arrange data and choices when choosing the best option, Thomas L. Saaty of the Wharton School of Business initially created AHP in the 1970s. AHP can be used to break down a complicated problem that is strategic, unstructured, and dynamic into smaller, more manageable components through the use of a hierarchy.

Table 3. Comparison Rating Scale

Scale of Importance	Definition	Description
1	Equally Good	Both elements have the same influence
2	Better	Experience and judgement slightly favour one element over its counterpart

Source : Data adapted from Thomas L Saaty (2008)

Table 4 below displays the findings of the AHP-based competitiveness analysis of Padang City's creative sector, where it can be seen that the leading creative industry in Padang City is culinary, with an AHP final value of 40.066%, followed by the creative industry of crafts with a final value of 20.081%, and the third place is fashion with a final value of 10.596%. These three subsectors are said to be superior because they have a dominant and prominent final value and are highly competitive compared to other creative industry subsectors. These three subsectors have a final value of 2 digits. Meanwhile, the other 13 subsectors only have one digit with a small final value of 10 per cent. The smallest final value is 0.662% in the printing, publishing and typing subsector, followed by the fine arts subsector and the television and radio subsector. This shows that in Padang City, the creative industries of these three subsectors are not very developed. For printing, typing and publishing, before the development of social media, newspapers were quite popular, as well as television and radio, however, as social media has grown in popularity, individuals are increasingly using sites like Google, Instagram, YouTube, Facebook, and others to look for information.

With the discovery of superior and highly competitive creative industries, the next analysis was conducted for the culinary subsector using SWOT analysis. In Padang City, the culinary business is present in practically every subdistrict. The products produced are also diverse, such as packaged and served food, and some are souvenirs in the form of snacks or for eating rice as a side dish, such as rendang, jerky, kale, and others. Identification was made after interviewing several industry players who were considered to have a good understanding. There were two sections to the questionnaire. Information about the company's history is covered in the first section. For the second section, data was collected on the following topics: factor conditions, demand circumstances, associated and supporting sectors, firm strategy, structure, and competition.

Table 4. Results of Creative Industry Ranking in Padang City

No	Subsectors	Final Grade
1	Game Application and Development	1,656%
2	Visual Communication Design	2,981%
3	Architecture	0,993%
4	Product Design	1,656%
5	Fashion	10,596%
6	Films, Anime and Videos	3,311%
7	Photography	2,318%
8	Furniture and Interior Design	1,324%
9	Crafts	20,861%
10	Culinary	40,066%
11	Music	3,624%
12	Printing, Publishing and Typing	0,662%
13	Advertising	2,981%
14	Performing Arts	5,629%
15	Fine Art	0,662%
16	Television and Radio	0,662%

Note : Data obtained by processed results

A SWOT analysis is used to examine an internal organization and external circumstances, and it forms the basis for developing work plans and strategies. An evaluation of an organization's weaknesses and strengths is part of internal analysis. In the meantime, the external analysis encompasses the organization's dangers as well as its prospects. A matrix is filled with internal factors known as matrix of internal stragic factors, or IFAS (*Internal Strategic Factor Analysis Summary*). A matrix known as the external strategic factors matrix incorporates external factors. EFAS stands for *External Strategic Factor Analysis Synopsis*.

Table 5. An Overview of the Padang City Culinary Industry's Internal and External Factors

Internal Factors	External Factors
Strength (S)	Opportunity (O)
Products with local culture	Tourism industry growth increases
Best-quality raw materials	Technology and information development
Production quantity increased	National policy support for creative industries
Top Products of Padang City	Become a tourist destination
Good packaging	Entry into force of the AEC
Products are easy to ship	Internationally recognized
Weaknesses (W)	Threats (T)
Capital	No product protection
Quality standards are not guaranteed	Similar business competitors
Low employee education	Limited raw materials

Promotion is still minimal

There is an expiry period

No business legality

Stale and/or moldy products

Source : Data adapted from interview results in 2024

The outcomes of the internal and external strategic factors matrix are then fed into a quantitative model known as the SWOT matrix to establish the strategy. SWOT analysis examines the organization's internal strategic factors, or its strengths and weaknesses, before turning to the external environment to examine opportunities and threats. The internal environment is an environment whose changes can be controlled by the organization, while the organization cannot control the external environment changes, which are sometimes difficult to predict; therefore, changes in the external environment need greater attention than changes in the internal environment. The identification results found six strengths, five weaknesses, six opportunities and five threats (table 5).

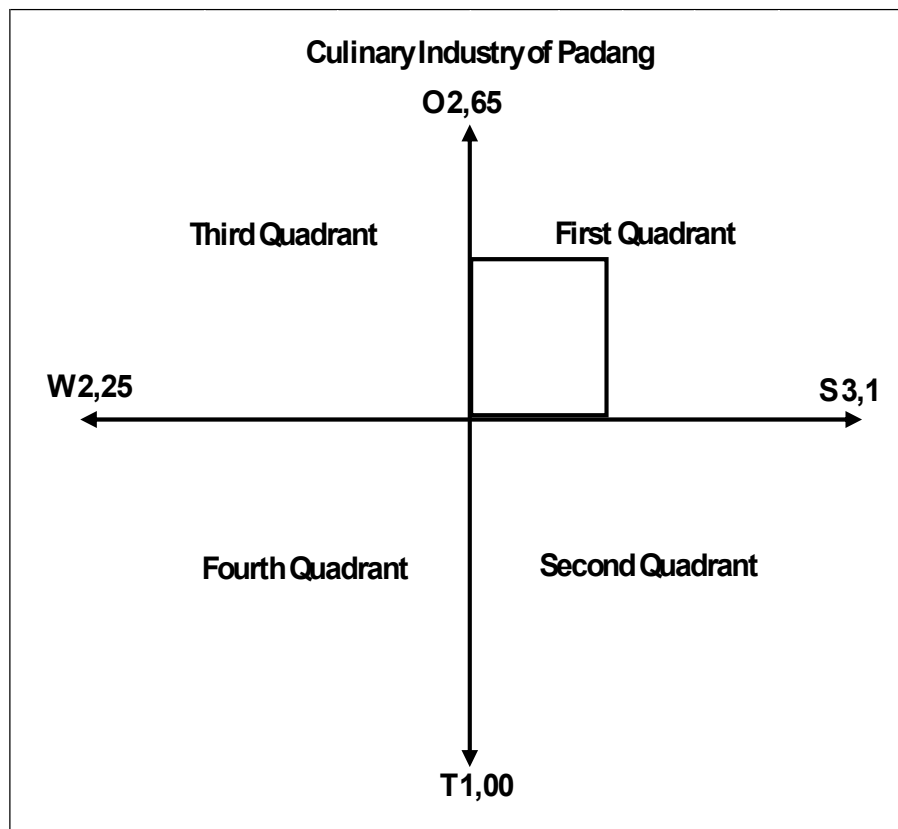


Figure 2. SWOT Matrix Of The Culinary Industry

This figure illustrates the position of the Culinary Creative Industry within the Strength, Weakness, Opportunity, and Threat (SWOT) framework. According to the results of a SWOT analysis that employed IFAS, EFAS, and SWOT charts to determine what is in the industry, the culinary creative industry is well-positioned to facilitate the creation of strategic advantages. The results obtained from the IFAS matrix are 2.25. Based on the EFAS matrix table, which results in a value of 1.65, the culinary industry is located in quadrant 1, namely the S-O strategy,

which shows that this business has an environment and many strengths that encourage utilizing these opportunities. This situation is oriented towards aggressive growth (Growth Oriented Strategy), which indicates the state of the industry that is strong and able to continue to develop and excel in competition by taking the opportunity or opportunity of the ASEAN free market (AEC) to achieve maximum turnover. In most cases, MSMEs can use WO, ST, or WT strategies to get to a point where they can use SO strategies. Players in the creative industry have a lot of opportunities to take advantage of the free market's implementation in the ASEAN region, including investment opportunities and market potential. The largest obstacle facing participants in the creative industry is figuring out the best strategy to win the competition in order to take advantage of these opportunities.

Table 6. SWOT Matrix Of The Padang City Culinary Industry

Internal Factor	Strength	Weakness
	<ol style="list-style-type: none"> 1. Products with local culture 2. Best quality raw materials 3. Production quantity increased 4. Top Products of Padang City 5. Good packaging 6. Products are easy to ship 	<ol style="list-style-type: none"> 1. Capital 2. Quality standards are not guaranteed 3. Low employ 4. Education 5. Promotion is still minimal 6. No business legality
External Factor	Opportunity	Threat
	<ol style="list-style-type: none"> 1. Tourism industry growth increases 2. Technology and information development 3. National policy support for creative industries 4. Become a tourist destination 5. Entry into force of the AEC Internationally recognized 	<ol style="list-style-type: none"> 1. No product protection 2. Similar business competitors 3. Limited raw materials 4. There is an expiry period stale and/or moldy products
	S-O Strategy	W-O Strategy
	<ol style="list-style-type: none"> 1. The existence of tour packages 2. Use of online media as a promotion 3. Create product innovations using technology 	<ol style="list-style-type: none"> 1. Establishing vocational education that suits the needs of regional industries 2. Implementation of operational standards and product quality 3. Collaborate with large companies for CSR 4. Utilizing MSME credit

S-T Strategy	W-T Strategy
<ol style="list-style-type: none"> 1. Innovate products in order to compete with competitors 2. Establish price and quality standards in production center 3. Propose product protection 	<ol style="list-style-type: none"> 1. Create a group of fellow culinary industry entrepreneurs 2. Planting of raw material trees 3. Manage copyrights

Source : SWOT, 2024

The Role Of Triple Helix

Padang City's creative and leading industries in Quadrant I have the potential to be developed. Innovation capability and competitive advantage are indispensable for the development of creative industries. To establish a competitive edge, one must be able to innovate (Harahap, 2023). Businesses without innovation will not be able to compete and prosper during the ASEAN free trade era. Companies will be driven to continuously innovate in order to produce goods that meet consumer desires as a result of shifting consumer needs and desires to satisfy themselves. For this reason, it is necessary to support cooperation between intellectuals, businesses, and government called Triple Helix (Indonesia, 2007) in order to encourage innovation by creating dynamic interaction and communication. The implementation of the triple helix model has been applied to SMEs in Bandung and Banten. A number of the triple helix's elements pertaining to the sustainability of the creative sector can also be used in West Sumatra Province, particularly in Padang City.

Conclusions and Recommendations

The creative and leading industries in Padang city have existed before independence and have their own markets. Padang City's culinary industry is located in quadrant I according to the IFAS and EFAS matrix's computation and analysis. This means the company carries out an SO strategy, utilizing its internal strengths to attract external benefits. This means that the company carries out the SO strategy to take advantage of the company's internal strengths to attract external benefits. Organizations typically use WO, ST, or WT strategies to obtain to the point where they can use a SO strategy. The existence of the ASEAN free market is a threat and also an opportunity that must be utilized. The village government has the opportunity to create a tourist village by introducing creative industry products. The government has provided various credit facilities to overcome capital problems but has not been well-socialized among creative industry players. These creative industries already have comparative advantages in terms of raw materials, taste, quality, and delicacy, according to the Structure, Competition, and Corporate Strategy. The competitive advantage must be created/enhanced to compete in the market. As a result, innovation is required to develop additional differentiators. Product excellence is promoted, one of which is by using online media. Innovation capability and competitive advantage are indispensable for the development of the creative industry. For this reason, it is necessary to support cooperation between intellectuals, businesses and government to encourage innovation capabilities by creating dynamic interaction and communication that being able to compete in the Asian market.

To foster a robust ecosystem for the creative and superior industries in West Sumatra, the government should prioritize the establishment of specialized vocational study programs focused on high-innovation entrepreneurship. It is recommended that the Padang City Government serves as a central coordinator for a Triple Helix collaboration, facilitating strategic partnerships between universities and local creative enterprises. Furthermore, entrepreneurs should proactively leverage Corporate Social Responsibility (CSR) initiatives and banking partnerships to secure the necessary funding and technical expertise for sustainable growth

Aknowledgements

The authors gratefully acknowledge the support from university for providing internal research funding that made this study possible.

References

Books :

- Alisjahbana, Armida S., et al. (2002). "Regional Competitiveness, Concept and Measurement in Indonesia", Yogyakarta, BPFE.
- Blanchard, Oliver (2017). *Macroeconomics; Practice, Engage, and Assess*, Seventh Edition. Pearson.
- Harahap, EF (2025). *Ekonomi Mikro (Teori, Analisis, dan Aplikasi dalam Keputusan Ekonomi)*. Queen Pustaka Nusantara. ISBN. 978-634-04-6122-0
- Porter, M. E. 1998. *Competitive Strategy: Techniques for Analysing Industries and Competitors*. Erlangga, Jakarta.
- Wheelen, T. L., & Hunger, J. D. (2012). *Concepts in strategic management and business policy: Toward global sustainability*. Pearson.

Journals :

- Daryono Soebagyo, Triyono Triyono, Yuli Tri Cahyono (2013), Regional Competitiveness and Its Implications for Development, *Journal of Development Economics* Volume 14, Number 2, December 2013, pp. 160-171
- Directorate of Innovation Systems, Directorate General of Innovation Strengthening, Ministry of Research, Technology and Higher Education, (2019). *Mapping Report on the Development of Regional Competitiveness Index Information System and Innovation Data*
- Dupeyras, A. and N. MacCallum (2013), "Indicators for Measuring Competitiveness in Tourism: A Guidance, Document", *OECD Tourism Papers*, 2013/02, OECD Publishing. <http://dx.doi.org/10.1787/5k47t9q2t923-en>
- European Commission. 2013. *EU Regional Competitiveness Index*. Luxembourg: Publications Office of the European Union.
- Harahap, Erni Febrina. Luviana, Nurul Huda (2020). Tinjauan Defisit Fiskal, Ekspor, Impor dan Jumlah UMKM Terhadap Pertumbuhan Ekonomi Indonesia. *Jurnal Benefita* 5(2) Juli 2020 (151-161). DOI:[10.22216/jbe.v5i2.4907](https://doi.org/10.22216/jbe.v5i2.4907)

- Harahap, Erni Febrina, (2017). Analysis of Determinants of Income and Efforts to Improve the Welfare of Street Vendors in Padang City, *European Journal of Business and Management* ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol.9, No.3, 2017, www.iiste.org
- Husain, Muhammad Najib, et.al. The sustainability development dilemma in green public relations: part of CSR failure? Vol 7; Ed 3, Nov 2023, P. 759-778. *JURNAL STUDI KOMUNIKASI*. DOI: <https://doi.org/10.25139/jsk.v7i3>
[Published 30-11-2023](#)
- Indonesia, B. E. K. (2016). *Indonesia Creative Economy Survey Results*, Jakarta.
- Katarzyna Chrobocinska, (2021), Comparative Analysis of Regional Competitiveness in Poland from 2010-2019 in the Context of the Concept of Sustainable Development, *Sustainability* 2021, 13, 3202. <https://doi.org/10.3390/su13063202>
- Mahardhani AJ, Setiawan Z, Harahap EF, et al. (2024). Assessing the impact of supporting facilities on the development of halal tourism: A bibliometric review. *Journal of Infrastructure, Policy and Development*. 8(11): 8286. <https://doi.org/10.24294/jipd.v8i11.8286>
- Majewska, J., & Truskolaski, S. (2017). Spatial concentration of economic activity and competitiveness of Central European regions. In Wach, K., Knežević, B., & Šimurina, N. (Eds.), *Challenges for international business in Central and Eastern Europe (Przedsiębiorczość Międzynarodowa*" vol. 3, no. 1). Kraków: Cracow University of Economics,
- Martin, R., Kitson, M., & Tyler, P. (Eds.). (2006). *Regional Competitiveness*. Routledge
- Negrea Alina Petronela, Valentin Cojanu (2013), Supporting regional competitiveness through innovation. Case study: Sud Muntenia, *Journal of International Studies*, Vol. 6, No 1, 2013, pp. 51-58.
- R&D "KOMPAS"/INO, (2015). Extracted from the presentation "*Competitiveness Analysis and Development Strategy for 33 Indonesian Provinces*" by Lee Kuan Yew School of Public Policy - National University of Singapore.
- Saaty, T.L (2008). Decision Making With Analytic Hierarchy Process. *International Journal of Services Sciences*. 1, 83. <https://doi.org/10.1504/IJSSCI.2008.017590>
- Simatupang, Togar (2017). Needs Evaluation of Entrepreneurship Policy at the Agenda-Setting Stage. *International Journal of Business and Society*
- Tafdil Husni et al., (2008), Development of Small and Medium Enterprises with Small Industry Cluster Model (Case of SMEs in West Sumatera), Research Report.
- World Economic Forum. (2014). *The Global Competitiveness Report 2014-2015*. Switzerland.

Conference Proceeding :

- Harahap, Erni Febrina., A. Heri Iswanto, Delipiter Lase, Rizqi Putri Nourma Budiarti, Sritrusta Sukaridhoto (2024). Using Support Vector Machines for Classification Datamining on International Trade Price Index Data. International Conference on Environmental, Mining, and Sustainable Development 2022 AIP Conf. Proc. 3001, 110001-1–110001-8; <https://doi.org/10.1063/5.0183902>. Published by AIP Publishing. 978-0-7354-4850-6/\$30.00. 110001-1 - 110001-8. Research Article | February 21 2024.
- Harahap, Erni Febrina, Helmawati Helmawati, Siti Rahmi, Zaqiah Ramadhani, and Mora Mora, (2022), Economic Competitiveness and Quality of Human Resources in West Sumatra, in *The Second Economics, law, Education and Humanities International Conference*, KnE Social Sciences, pages 246-253. DOI 10.18502/kss.v7i6.10627
- Subagja, Iwan Kurniawan (2017). Creative Industry Competitiveness in Indonesia (Study on Creative Industry Map). International Conference of Graduate School on Sustainability. International Conference “Sustainable Development Goals 2030 Challenges and Its Solutions”. 11-12 August 2017. P. 148-177. ISBN: 978-979-3220-41-3

Website :

- The IMD World Digital Competitiveness Ranking (2019) results, [https://www.imd.org/wcc/worldcompetitiveness-centre-rankings/world-digital-competitiveness-rankings-2019/West Sumatra](https://www.imd.org/wcc/worldcompetitiveness-centre-rankings/world-digital-competitiveness-rankings-2019/West%20Sumatra) Tourism Office (2021).